

## The Global Ocean (EA1121 // @globaloceanS16)

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### Module Overview:

This module frames the concept of "the global ocean" – the premise that ~70% of the Earth's surface functions as a single, interconnected system – and explores the nature and phases of dynamics linkages between human activities and marine environments.

### Session Schedule & Readings

Class Meeting	Topic	Readings
18 Jan	Introduction – nuts & bolts, mutual contract, trailer of things to come	--
25 Jan	The "global ocean" concept	Steinberg (1999a); WWF (2015); Sheridan (2015)
1 Feb	Fishing down the food web	Pauly <i>et al.</i> (1998); Pinsky <i>et al.</i> (2011)
8 Feb	Transportation (the global ocean gets smaller)	Maslin & Lewis (2015); Stephenson <i>et al.</i> (2011)
15 Feb	Ocean & empire	Lambert <i>et al.</i> (2006) Mitchener & Weidenmier (2008)
22 Feb	Law of the Sea, ocean use, and zoning	Steinberg (1999b); Edgar <i>et al.</i> (2014)
29 Feb	Geographic frontiers I – concept	Barbier (2012); Parker <i>et al.</i> (2008)
7 Mar	Geographic frontiers II – the 'blue frontier'	Smith (2000); McCauley <i>et al.</i> (2015)
14 Mar	Synthesis	Steinberg <i>et al.</i> (2012); Kolbert (2006)

## MODULE READINGS (by session topic):

Note that the readings listed here may be supplemented with web links, additional titles, and other media and/or resources during the term. These supplemental materials will be available on Learning Central, organised according to session topic.

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### The "global ocean" concept:

- Steinberg PE (1999a) Navigating to multiple horizons: toward a geography of ocean-space, *The Professional Geographer* 51, 366–375
  - WWF (World Wildlife Fund) (2015) *Living blue planet report*, available: [http://assets.worldwildlife.org/publications/817/files/original/Living\\_Blue\\_Planet\\_Report\\_2015\\_Final\\_LR.pdf?1442242821&\\_ga=1.191468330.1499257839.1452783489](http://assets.worldwildlife.org/publications/817/files/original/Living_Blue_Planet_Report_2015_Final_LR.pdf?1442242821&_ga=1.191468330.1499257839.1452783489)
  - Sheridan K, Building a smart Internet, *Hakai Magazine* 25 May 2015: <http://bit.ly/1LsSLaa>
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### Fishing down the food web:

- Pauly D, Christensen V, Dalsgaard J, Froese R, Torres F (1998) Fishing down marine food webs, *Science* 279, 860–863
  - Pinsky ML, Jensen OP, Ricard D, Palumbi SR (2011) Unexpected patterns of fisheries collapse in the world's oceans, *Proceedings of the National Academy of Sciences* 108, 8317–8322.
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### Transportation:

- Stephenson SR, Smith LC, Agnew JA (2011) Divergent long-term trajectories of human access to the Arctic, *Nature Climate Change* 1, 156–160
  - Lewis SL, Maslin MA (2015) Defining the Anthropocene, *Nature* 519, 171–180
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### Ocean & Empire:

- Lambert D, Martins L, Ogborn M (2006) Currents, visions and voyages: historical geographies of the sea, *Journal of Historical Geography* 32, 479–493
  - Mitchener KJ, Weidenmier M (2008) Trade and empire, *The Economic Journal* 118, 1805–1834
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### **Law of the Sea, ocean use, and zoning:**

- Steinberg PE (1999b) Lines of division, lines of connection: stewardship in the world ocean, *Geographical Review* 89, 254–264
  - Edgar GJ *et al.* (2014) Global conservation outcomes depend on marine protected areas with five key features, *Nature* 506, 216–220
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### **Geographic frontiers I – concept:**

- Barbier EB (2012) Scarcity, frontiers and development, *The Geographical Journal* 178, 110–122
  - Parker DC, *et al.* (2008) Case studies, cross-site comparisons, and the challenge of generalization: comparing agent-based models of land-use change in frontier regions, *Journal of Land Use Science* 3, 41–72
- 

### **Geographic frontiers II – the 'blue frontier':**

- Smith HD (2000) The industrialisation of the world ocean, *Ocean & Coastal Management* 43, 11–28
  - McCauley DJ, *et al.* (2015) Marine defaunation: Animal loss in the global ocean, *Science* 347, 1255641
- 

### **Synthesis:**

- Steinberg PE, Nyman E, Caraccioli MJ (2012) Atlas swam: Freedom, capital, and floating sovereignties in the Seasteading vision, *Antipode* 44, 1532–1550
  - Kolbert E, The darkening sea, *The New Yorker*, 20 November 2006
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